

specimen, from Gastonburg, Ala. It was plainly a *B. armifera*, large, especially the last whorl, much larger than the penultimate, evidently overgrown, with a very small and slight parietal lam. A specimen, corresponding especially with the first-mentioned, of *Bifid. corticaria*, from Jackson county, Ala., was received years ago from Mr. H. E. Sargent. 3.1 mm. high; peristome straight and thin; aperture without a trace of lamellæ.

REV. A. B. KENDIG, D. D.

Dr. Amos B. Kendig, one of the best known Methodist clergymen of New England, died January 20, 1909, at Brookline, Mass.

Dr. Kendig was born in Lancaster county, Penna., in 1830, removing to Iowa when a young man. He at first studied law, but changed to the ministry, and was ordained in 1852. In the Civil War he served for a time as chaplain of the 9th Iowa regiment.

In 1875 Dr. Kendig came to Boston and became pastor of the Monument Square M. E. Church in Charlestown. Later he held pastorates in Lynn, Worcester and Boston; then going to Brooklyn, N. Y., East Orange, N. J., and New York City.

Dr. Kendig was known for his energy in all that he undertook. He was a man of devout Christian character, and he brought to his profession the courtesy and the manners of a gentleman of the old school. A man of broad culture and sympathy, he took great interest in scientific matters, and was a member of several learned societies. He took up the study of mineralogy at one time, and made a large and fine collection of minerals, which he presented to a college in Iowa. Later he made a study of land shells of the world, built up a large and valuable collection, and accumulated a library. In 1903 he decided to give up the study of shells, his collection going to the Franklin and Marshall College, Lancaster, Pennsylvania. Dr. Kendig had many warm friends among conchologists. He is survived by two daughters, Mrs. George F. Kellogg and Mrs. Silas Peirce.

SUPPLEMENTARY NOTES ON THE BREEDING SEASONS OF THE
UNIONIDÆ.

BY CHAS. H. CONNER.

Dr. A. E. Ortmann's article, relative to the breeding seasons of the *Unionidæ*, will doubtless be received as an interesting and valuable contribution to the subject, and in order to extend its usefulness, so far as my limited ability will permit, I beg to present a condensed report of my observations, made from 1905 to 1908 inclusive. I, too, have noticed some apparent variations in the breeding periods of individuals, as also in the species, in different years. Possibly this

difference may be due more or less to difference in the seasons (weather) from year to year.

The facts already obtained have an important bearing on legislative action already taken or contemplated for the protection and preservation of our fresh-water mussels. Unlike the song and game birds and the mammals, no close season will serve to protect all of the species. The taking of all clams under the fully adult size must be prohibited to prevent their extermination by pearl-hunters and button manufacturers.

TABLE SHOWING GRAVID PERIODS OF THE UNIONIDÆ.

The letter *g* indicates gravid individuals, *n* denoting that none were found gravid, *gn* that some females examined were gravid, others not gravid, either among specimens taken at the same time or in the same month in different years.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
<i>Anodonta cataracta</i> Say. . . .	g	g	g	gn	gn	n	n	n	g	g	g	g
<i>Anodonta implicata</i> Say. . . .	g		g	g	g	n	n	n	g	g	g	g
<i>Anodonta undulata</i> Say. . . .			g	n	n							g
<i>Alasmidonta undulata</i> Say. . . .								g				
<i>Alasmidonta varicosa</i> Lamarck.					g	n						
<i>Lampsilis cariosus</i> Say. . . .		g	g	n	g	g	g		g	g		
<i>Lampsilis ochraceus</i> Say. . . .				g	g	g						
<i>Lampsilis radiatus</i> Gmelin . .	g	g		g	g	g	g	g	g	g	g	g
<i>Lampsilis ventricosus</i> Barnes. .								g	g			
<i>Lampsilis ligamentinus</i> Lamarck.								g	g			
<i>Margaritana margaritifera</i> L. .	n				g		g				n	
<i>Quadrula multiplicata</i>											g	
<i>Quadrula perplicata</i> Conrad. .											n	
<i>Quadrula trapezoides</i> Lea . . .											n	
<i>Strophitus edentulus</i> Say. . . .								g				
<i>Symphynota viridis</i> Conrad . .								g				
<i>Unio complanatus</i> Solander . .	n	n		gn	g	g	g	gn	n	n	n	n
<i>Unio heterodon</i> Lea.		g										
<i>Unio nasutus</i> Say	g	g	g	g	g	g	gn	g	g	g	g	g
<i>Unio northamptonensis</i> Lea. .	approximately as <i>U. complanatus</i> .											
<i>Unio occidens</i> Lea									g			
<i>Unio rectus</i> Lamarck.								g				
<i>Anodonta footiana</i> Lea								g				
<i>Anodonta subcylindraceus</i> Lea .								g				
<i>Lampsilis superiorensis</i> Marsh .								g				